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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,642	01/04/2002	Thomas J. Conway	56995US002	9185

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EXAMINER

NORDMEYER, PATRICIA L

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,642

Applicant(s)

CONWAY ET AL.

Examiner

Patricia L. Nordmeyer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 46-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 46-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 112 1st paragraph rejection of claims 1 – 22 and 46 – 51 in the paper dated May 3, 2005 is withdrawn due to Applicant's arguments and explanations in the paper dated August 4, 2005.

2. The 35 U.S.C. 103 rejection of claims 1 – 11, 46 – 49 and 51 over Gajewski et al. in view of McGurran et al. in the paper dated May 3, 2005 is withdrawn due to Applicant's arguments and explanations in the paper dated August 4, 2005.

3. The 35 U.S.C. 103 rejection of claims 12 – 22 and 50 over Gajewski et al. in view of McGurran et al. in the paper dated May 3, 2005 is withdrawn due to Applicant's arguments and explanations in the paper dated August 4, 2005.

New Rejections

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1 – 11, 46 – 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gajewski et al. in view of Wheatley et al. (USPN 6,049,419).

Gajewski et al. discloses a laminate (Column 1, lines 13 – 14) comprising a first and second bonding sheets (Column 8, lines 3 – 4) made from polyvinyl butyral that have a major surface surfaces and peripheral edges (Column 7, lines 1 – 2 and Figure 2, # 12 and 24), wherein both the first and second bonding layers are suitable for bonding to glazing components (Column 5, lines 21 – 24 and lines 29 – 32). A transparent optical sheet comprising an extruded multi-layer sheet of semi-rigid material having a major surface and a peripheral edge (Column 7, lines 15 – 16 and Figure 4, #26) such as polyester (Column 8, lines 26 – 27) is located in between the laminating sheets and glazing components (Column 5, lines 21 – 32) and is bonded with the bonding sheets by laying the edge of the optical sheet within the peripheral edge of the bonding sheet (Figure 2). As seen in Figure 4, the major surface of the optical sheet and the major surface of the bonding materials are positioned together. The optical film is of size so that is positioned within the peripheral edge of the glazing components (Figures 1 and 2, Column 6, 8, lines 35 – 37). While one of the major surfaces of the bonding sheets are in contact with the optical sheet, the other major surface of the bonding sheets are in contact with the major surfaces of the glazing components (Figure 2, #12, 14, 24 and 22). The optical film is completely within the peripheral edges of the glazing components (Figure 2, #12, 20 and 22). The layers in the laminate are fully bonded together so that no voids adjacent to the peripheral edge of the optical sheet (Figure 5). However, Gajewski et al. fail to disclose a non-metallic birefringement multi-layer optical film and wherein the optical film is a film from the group consisting of infrared

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reflecting films, polarized films, non-polarized films, multi-layer films, colored films, tinted films and decorative films.

Wheatley et al. teach a non-metallic birefringement multi-layer optical film (Column 5, lines 7 - 9) made from a variety of polymer materials (Column 9, lines 45 - 65) wherein the optical film has many applications including infrared reflecting films, polarized films and multi-layer films (Column 5, lines 13 - 16; Column 7, lines 26 - 34) for the purpose reducing the required cooling of an automobile in the summer (Column 32, lines 40 - 46).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the non-metallic birefringement multi-layer optical film that has many applications that include infrared reflecting films, polarized films and multi-layer films, in Gajewski et al. in order to have an optical body that reduces the required cooling of an automobile in the summer as taught by Wheatley.

6. Claims 12 - 22 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gajewski et al. in view of Wheatley et al. (USPN 6,049,419) as applied to claims 1 - 11, 46 - 49 and 51 above, and further in view of Frost et al.

Gajewski et al. discloses a laminate comprising a first and second bonding sheets made from polyvinyl butyral that have a major surface surfaces and peripheral edges, wherein both the first and second bonding layers are suitable for bonding to glazing components. A transparent

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optical sheet comprising an extruded multi-layer sheet of semi-rigid material having a major surface and a peripheral edge such as polyester is located in between the laminating sheets and glazing components and is bonded with the bonding sheets by laying the edge of the optical sheet within the peripheral edge of the bonding sheet. The major surface of the optical sheet and the major surface of the bonding materials are positioned together. The optical film is of size so that is positioned within the peripheral edge of the glazing components. While one of the major surfaces of the bonding sheets are in contact with the optical sheet, the other major surface of the bonding sheets are in contact with the major surfaces of the glazing components. The optical film is completely within the peripheral edges of the glazing components. The layers in the laminate are fully bonded together so that no voids adjacent to the peripheral edge of the optical sheet. However, Gajewski et al. fails to disclose the multi-layer optical film having a peripheral strip having a width and an inner peripheral edge, said peripheral strip being disposed beyond the peripheral edge of said optical sheet and the inner peripheral edge of said strip and peripheral edge of said optical sheet defining a slit therebetween, the slit going through the optical sheet and one said first or second bonding sheets, a hole formed through the optical film, the optical film peripheral edge extending beyond the peripheral edge of at least one glazing component and the optical film peripheral edge extending beyond the peripheral edge of at least one glazing component.

Frost et al. teach an intermediate film, optical sheet, in between two glazing components that is cut in a variety of sizes including the same size as the glazing components, smaller than the components or larger than the components, extends beyond the edges of the glazing

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components, (Column 2, lines 6 – 9) or forming an incision or slit into the intermediate film, optical sheet, (Column 2, lines 10 – 14 and Figure 3, #8) for the purpose of removing excess material from the intermediate film to ensure that the film is completely encased by the outer substrates, controlling corrosive risks and for inserting wires and other electronic equipment in between the layers of material.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the slits and the different sizes of optical sheets in Gajewski et al. in order to remove excess material from the intermediate film to ensure that the film is completely encased by the outer substrates, controlling corrosive risks and for inserting wires and other electronic equipment in between the layers of material as taught by Frost et al.

Response to Arguments

7. Applicant's arguments with respect to claims 1 – 22 and 46 – 51 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (571) 272-1496. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Nordmeyer
Examiner
Art Unit 1772

pln
pln

[Signature]
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

9/26/05